



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,714	07/18/2003	Tomio Hirano	240464US6	1566
22850	7590	04/19/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CHEVALIER, ALICIA ANN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,714

Applicant(s)

HIRANO ET AL.

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) 8-17 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-17 are pending in the application, claims 8-17 are withdrawn from consideration.
2. Amendments to claims, filed on January 3, 2005, have been entered in the above-identified application.

Election/Restrictions

3. Applicant's election with traverse of Group I, claims 1-7, in the reply filed on January 3, 2005 is acknowledged. The traversal is on the ground(s) that amendment to claims that it is now appropriate for examination to be conducted on all of claims 1-17. This is not found persuasive because the amendments to claims, specifically claim 1, only alter the intended use not alter the structure of the claim. A statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a *structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

The requirement is still deemed proper and is therefore made FINAL.

4. Claims 8-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on January 3, 2005.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case amended claim 1 contains the limitation "0.06 nm or more." The specification does not have support for this limitation; therefore this limitation is considered new matter. Furthermore, the specification only has support for "a depth of a laser mark on the cut side face is 0.06 mm or more" (page 4, lines 22-23, paragraph #15).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lawandy (U.S. Patent No. 5,919,607).

Regarding Applicant's claim 1, Lawandy discloses a glass comprising a glass substrate (col. 7, line 41) having a cut side at least partially formed by cutting with laser light radiation

Art Unit: 1772

(*col. 7, lines 39-40*), wherein a surface roughness of the cut side face of the glass substrate is 50 nm or less (*col. 7, line 22*), and a depth of a laser mark formed by the laser light radiation on the cut side face is 0.06 nm or more (*col. 7, lines 32-33*).

The preamble “for a touch panel” is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a ***structural difference*** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

Regarding Applicant’s claim 3, Lawandy discloses that the glass substrate has no crack and pulverized powder at the cut side face, since the reference is silent about cracks and pulverized powder.

Regarding Applicant’s claim 4, Lawandy discloses that the depths of the laser mark and another laser mark on a second cut side face of the glass substrate are different, the second cut face being different from the first cut side face (*figure 15*).

Regarding Applicant’s claim 6, the laser mark formed on the cut side face of the glass substrate is deemed to have a predetermined depth from a first principle surface, and another laser mark is formed on a second cut side face of the glass substrate and deemed to have a predetermined depth from a second principal surface, the second side face being different from the first cut side face and the second principal surface is a back surface of the first principal surface (*figure 15*).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawandy as applied above.

Lawandy is relied upon as described above.

Lawandy fails to disclose that the difference in depths of the laser marks is different by 2% or more between on the first cut side face and on the second cut side face or the thickness of the glass substrate is 0.25 mm or more and 0.7 mm or less. Note: The Examiner has constructed "0.25 mm or more and 0.7 mm or less" to mean equal to or greater than 0.25 mm and less than or equal to 0.7 mm.

It would have been an obvious matter of design choice to change the thickness or depth of glass or marks, since a modification would have involved a mere change in size of the glass or marks. A change in size or shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (I) and (IV).

10. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba et al. (U.S. Patent No. 6,287,996) in view of Jack (U.S. Patent No. 4,987,287) and Yoneda et al. (U.S. Patent No. 5,314,731).

Chiba a curved glass plate for window glass for automobiles (*title and col. 1, liens 5-8*).

Art Unit: 1772

Chiba discloses a glass comprising a glass substrate with a strength of 45 kgf or more and 90 kgf or less based on a static load test (*col. 11, lines 13-18*).

Note: The Examiner has constructed “45 kgf or more and 90 kgf or less” to mean equal to or greater than 45 kgf and less than or equal to 90 kgf.

The preamble “for a touch panel” is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a *structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

Chiba fails to disclose that the substrate has a cut side formed by cutting with laser light radiation with a surface roughness of 50 nm or less and a depth of a laser mark 0.06 nm or more.

Jack discloses a method for etching vehicle identification numbers into the glass windows of automobiles, where the markings are permanent, yet unobtrusive (*title and col. 1, lines 12-15*). Jack discloses a glass comprising a glass substrate (*window, col. 6, line 11*) having a cut side at least partially formed by cutting with laser light radiation (*col. 2, lines 21-24*), and a depth of a laser mark formed by the laser light radiation on the cut side face is 0.06 nm or more (*1-10 angstroms, i.e. 0.1-1 nm, col. 6, lines 11-13*). Furthermore, Jack discloses that the glass substrate has no crack and pulverized powder at the cut side face, since the reference is silent about cracks and pulverized powder.

Yoneda discloses window glass for automobiles (*col. 1, lines 14-19*). Yoneda teaches that substantial scorching or a fine roughness, i.e. high surface roughness, on the surface of a

Art Unit: 1772

glass lowers its basic function and scatters light on its surface making it difficult to secure the field of view, and consequently there will be a problem in securing safety (*col. 1, lines 46-52*).

Chiba, Jack and Yoneda are analogous because they all disclose glass for windows in automobiles.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Jack's method for etching vehicle identification numbers on Chiba's window glass in order to impart a mark on the glass. One of ordinary skill in the art would have been motivated to etch a vehicle identification number in a window because it would allow the vehicle identification numbers to be permanent, yet unobtrusive on the car window. It is desirable to have the vehicle identification number etched into the glass because if the car is ever stolen it would be easy to identify.

The exact surface roughness of the glass is deemed to be a result effective variable with regard to the scattering of light. It would require routine experimentation to determine the optimum value of a result effective variable, such as surface roughness, in the absence of a showing of criticality in the claimed surface roughness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated by disclosure of Yoneda to minimize the surface roughness in order to avoid substantial scattering of light. One would have been motivated to minimize the surface roughness because it would allow better field of view and thus secure safety.

Art Unit: 1772

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alicia Chevalier

4/18/05